

#### IN THE UNITED STATES PATENT & TRADEMARK OFFICE

application No.:

10/520,815

Filing Date:

January 7, 2005

PCT Appl. No.:

PCT/JP2003/008552

Applicant(s):

Kohshi TAGUCHI et al.

Group Art Unit:

Unknown

Examiner:

Unknown

Title:

METHOD AND APPARATUS FOR FORMING SILICON

NITRIDE FILM

Attorney Docket:

2691-000013/US

### REQUEST FOR RECORDATION OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314 Mail Stop PCT

April 11, 2005

Sir:

Applicants attach hereto an English translation of the International Preliminary Examination Report which was filed in the present application on January 7, 2005. Please make this document part of the prosecution history of the present application.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

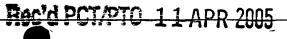
By:

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Reston, Virginia 20195

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DJD/bof Attachment



## PATENT COOPERATION TREATY



# Translation

# **PCT**

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 61997CT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)						
International application No.	International filing date (day)	month/year)	Priority date (day/month/year)				
PCT/JP2003/008552	04 July 2003 (04.0°		08 July 2002 (08.07.2002)				
International Patent Classification (IPC) or national classification and IPC H01L 21/31, 21/318, 21/205							
Applicant KANSAI TECHNOLOGY LICENSING ORGANIZATION CO.,LTD.							
<ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> </ol>							
2. This REPORT consists of a total of	3 sheets, includ	ing this cover s	heet.				
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
These annexes consist of a tot	al of sheets.						
3. This report contains indications relat	ing to the following items:						
I Basis of the report	I Basis of the report						
II Priority	II Priority						
III Non-establishment o	f opinion with regard to novel	ty, inventive st	ep and industrial applicability				
- ' -							
V Reasoned statement citations and explana	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
VI Certain documents c	VI Certain documents cited						
VII Certain defects in the	VII Certain defects in the international application						
VIII Certain observations on the international application							
		• • • • • • • • • • • • • • • • • • • •					
Date of submission of the demand		Date of completion of this report					
04 November 2003 (04.11.2003)		09 April 2004 (09.04.2004)					
Name and mailing address of the IPEA/JP		Authorized officer					
Facsimile No.	Telepi	none No.	·				

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/008552

contained in the international application in written form.  filed together with the international application in computer readable form.  furnished subsequently to this Authority in written form.  furnished subsequently to this Authority in computer readable form.  The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.  The amendments have resulted in the cancellation of:  the description, pages  the claims, Nos.  the drawings, sheets/fig  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**  * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).		of the report
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** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.	and 70	3 report as originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16).17).
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### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/JP 03/08552

v.	Reasoned statement under Article 3 citations and explanations supporting	5(2) with regard to novelty	, inventive step or industrial app	licability;
1.	Statement			
	Novelty (N)	Claims	1-8	YES
		Claims		NO
	Inventive step (IS)	Claims		YES
		Claims	1-8	NO NO
	Industrial applicability (IA)	Claims	1-8	YES
	•	Claims		NO

2. Citations and explanations

Document 1: JP 5-263255 A (Hitachi Electronics Engineering

Co., Ltd.), 12 October 1993

Document 2: EP 300447 A2 (Hitachi, Ltd.), 25 January 1989

The inventions set forth in claims 1 to 8 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Document 1 sets forth a method of forming a  $\rm Si_3N_4$  film by plasma CVD, using hexamethyl disilazane and NH $_3$  gas as raw materials.

Document 2 sets forth a plasma processing device provided with blow-out holes (35) which feed difficult-to-activate gas into an activation chamber (31), where said gas is activated, and activated reagent gas into the reaction chamber, and a gas supply port which supplies an easily activated gas.